

REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 11-29 are now present in this application. Claims 11, 19 and 29 are independent. Reconsideration of this application is respectfully requested.

Restarting of Reply Period to expire on January 7, 2005

Applicant's undersigned representative contacted Examiner Psitos on December 7, 2004 to receive a proper citation for the Fairchild et al. reference, that is applied in the rejection of a number of claims. Examiner Psitos acknowledged that the Fairchild reference was not identified except by name in the Office Action and provided Applicant's undersigned representative with a proper citation to Fairchild et al., U.S. Patent 5,506,824.

MPEP §710.06 indicates that, under these circumstances, the Reply Period should be restarted to expire one (1) month from the date that Applicant was informed of the identification of the applied reference. Because the date of correction was December 7, 2004, the Reply due date is extended to expire on January 7, 2005.

Examiner Psitos agreed to granting such an extension in the telephone discussion held on December 7, 2004.

Applicant also respectfully requests that U.S. Patent 5,506,824 to Fairchild et al. be listed on a Form PTO-892 in the next Office Action.

Rejections Under 35 U.S.C. §103

Claims 11-25 and 27-29 stand rejected over Shimizume considered with Finkelstein (and Fairchild). This rejection is respectfully traversed.

Because the rejection is based on 35 U.S.C. §103, what is in issue in such a rejection is "the invention as a whole," not just a few features of the claimed invention. Under 35 U.S.C. §103, a patent may not be obtained if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. The determination under §103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. See In re O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. See Medtronic, Inc. v. Cardiac Pacemakers, Inc., 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the

pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. E-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A showing of a suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232(Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Shimizume differs substantially from the claimed invention. As disclosed in col. 7, lines 4-44, Shimizume determines an absolute time, reproduction time from the innermost region of a CD-Rom disk, to determine where to switch from CAV method to the CLV method. The reproduction time corresponds to a specific distance from the innermost region of the disk. Thus, Shimizume is seen as basing his decision concerning switching from the CAV method to the CLV method on a relatively straightforward distance measurement based the time needed to record information on the disk to that distance from the innermost portion of the disk.

Shimizume has no disclosure of (1) detecting a sync signal from signals embedded in a wobbled physical track; (2) checking the frequency of the detected sync signal; and (3) determining whether to change the recording mode or not based on the checked frequency, as recited.

The Office Action then turns to Fairchild, which allegedly discloses ATIP recording for wobbled grooves "in this environment."

The Office Action then concludes that it would be obvious to modify the base system of Shimizume with the above teaching of Fairchild, the motivation being "to use standard disc formats commonly available."

In the first place, the Office Action never states what aspect of Shimizume is to be modified or how Fairchild's alleged teaching of ATIP recording for wobbled grooves is to be applied to Shimizume. Accordingly, the rejection is fundamentally unsound.

In the second place, even if Shimizume were modified to provide detection of a sync signal from signals embedded in a wobbled physical track, and to check of the frequency of the detected sync signal, there is no teaching in either Shimizume or Fairchild of determining whether to change the recording mode or not based on the checked frequency, as recited.

Moreover, the Office Action has not made out a *prima facie* case of proper motivation to modify Shimizume in view of Fairchild. Shimizume was filed more than two and 1/2 years after Fairchild, shows no need to be modified, and there is no apparent improvement in Shimizume that would result from being modified by Fairchild, especially, where the office Action provides no indication of that aspect of Shimizume which is to be modified or what aspect of Fairchild is to be used to modify the unspecified portion of Shimizume, especially in the absence of any specific reason to do so.

In the third place, the Office Action never demonstrates what standard formats are missing from Shimizume that are provided by Fairchild.

Accordingly, the rejection of independent claims 11, 19 and 29 is improper and should be withdrawn.

With respect to claims 12 and 20, which recite a combination of features, including wherein the sync signal is detected while recording input data to a recording medium in CAV mode, the Office Action then turns to Finkelstein, which allegedly teaches "the direct read during write ability."

In this regard, the Office Action discusses Fig. 6. Finkelstein has only four figures and does not contain a Fig. 6, so the Office Action is presumably referring to Fig. 6 of Shimizume or Fig. 6 of Fairchild. This is not clear.

In any event, the Office Action concludes that it would be obvious to modify Shimizume in view of Finkelstein to ensure proper recording during writing as well as monitoring the required signal format parameters.

Applicant respectfully submits that even if it were obvious to provide read and write capability for Shimizume, it would not be obvious to determine whether to change the recording mode or not based on the checked frequency, as recited, because none of the three applied references discloses or suggests such a feature.

Further, with respect to claims 14 and 22, Applicant respectfully disagrees that the reference combination applied in this rejection discloses that "changing the recording mode changes a rotating mode from CAV to CLV according to the checked frequency," as recited. As pointed out above, none of the applied references disclose or suggest the precursor to this step, i.e., the

applied references fail to disclose or suggest determining whether to change the recording mode or not based on the checked frequency. Because they fail to disclose the prerequisite for the step recited in claim 14, they do not disclose or suggest the logically following step recited in claim 14. Similar comments apply to the rejection of claim 22.

Further, with respect to claims 15 and 23, none of the applied references disclose determining a recording speed according to the checked frequency, and the Office Action has not made out a *prima facie* case that it would be obvious to modify Shimizume to check that frequency for reasons stated above.

Moreover, all dependent claims are allowable at least because of their dependency from one of the aforementioned independent claims as well as the additional limitations recited therein.

Reconsideration and withdrawal of this rejection of claims 11-25 and 27-29 is respectfully requested.

Claims 11, 13-19, 21-23 and 29 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 5,751,676 to Kusano in view of Fairchild. This rejection is respectfully traversed.

Kusano discloses an optical disk recording and reproducing system that switches control modes according to the reproducing position of the disk – see the Abstract. Kusano controls the rotating velocity at constant angular velocity (CAV) using the current rotating velocity in a pull-in enable range of the

synchronizing clock generator and, on the other hand, at constant linear velocity (CLV) to minimize rotating speed changes in a range exceeding the pull-in enable range (see Col. 3, lines 27-38). Kusano calculates a disk radial position from a target track – see col. 7, lines 44-64. Kusano uses an access controller 17 in the embodiment of Fig. 4 to detect the disk radial position, or a linear velocity detector 18 in the embodiment of Fig. 5, to detect the linear velocity of the disk, to determine where synchronization is possible.

Kusano does not disclose or suggest detecting a sync signal from signals embedded in a wobbled physical track; checking the frequency of the detected sync signal; and determining whether to change the recording mode or not based on the checked frequency, as recited.

The Office Action turns to Fairchild, which has nothing to do with determining whether to change the recording mode based on a checked frequency of a detected sync signal, but is directed to simply detecting and processing ATIP information to provide sync detection, address information and ATIP decoder status (see col. 2, lines 23-27, for example).

The Office Action then concludes, with absolutely no objective factual evidence presented in support of the conclusion, that it would be obvious to modify the base system of Kusano in view of Fairchild to permit a more defined (tighter sync ability) by reading the sync information directly from the medium itself.

Applicant respectfully disagrees for a number of reasons.

In the first place, the statement that the proposed modification of Kusano would result in a more defined (tighter) sync ability is pure speculation, unsupported by any objective factual evidence as required to support a rejection see In re Lee, cited above.

In the second place, Kusano's system appears to work very well and provides no indication that the system needs more defined sync ability to work properly.

In the third place, even if the proposed modification were made, there would be no incentive to base a determination of whether to change the recording mode based on the checked frequency of the sync signal. Kusano's system would still be expected to use the access controller 17 to calculate a disk radial position from the target track to serve as the basis for determining when to switch from CAV to CLV operation, or use the linear velocity sensed by the linear velocity detector 18 to serve as the basis for determining when to switch from CAV to CLV operation.

Because neither of the applied references disclose or suggest basing a determination of whether to change the recording mode based on a checked frequency of the sync signal, the only basis for this rejection is either unwarranted speculation or impermissible hindsight.

Similar comments apply to claim 29. Moreover, because each dependent claim contains all the features of the independent claims from which it depends, all dependent claims are allowable for the same reasons that the

independent claims (11 and 19) are allowable, as well as for the additional limitations recited therein.

Reconsideration and withdrawal of this rejection of claims 11, 13-19, 21-23 and 29 under 35 USC §103(a) is respectfully requested.

Claims 12 and 20 stand rejected under 35 USC §103(a) as unpatentable over Kusano in view of Fairchild (as applied above) further in view of Finkelstein.

This rejection is respectfully traversed.

Finkelstein is applied to disclose the ability to direct read while writing. The Office Action concludes that it would be obvious to modify the Kusano-Fairchild reference combination to ensure proper recording during writing as well as monitoring the required signal format parameters.

Applicant respectfully submits that the Kusano-Fairchild reference combination fails to disclose the claimed invention regardless of whether or not it is provided with read and write capability, for the reasons stated above. Accordingly, even if it were obvious to modify Kusano-Fairchild, which has not been demonstrated to be a proper reference combination for the reasons stated above, to detect the sync signal while recording input data to a recording medium, the resulting reference combination would not disclose, suggest or render obvious the claimed invention, including determining whether to change the recording mode based on a checked frequency of a detected sync signal.

Reconsideration and withdrawal of this rejection of claims 12 and 20 is respectfully requested.

Claims 11-28 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 5,377,178 to Saito et al. (hereinafter, "Saito") in view of JP 44927/1993 to Kokoku and JP 33470/1993 to Kokoku. This rejection is respectfully traversed.

In the first place, Applicant respectfully submits that this rejection is improper because it violates the principle that the Examiner should select the best art to reject the claims and not make multiple rejections of the same claims with different art absent justifying circumstances. Most of these claims have already been rejected over other references which cannot be sworn behind.

In the second place, the Office Action admits that the Kokoku documents are not available, and no copy of either reference is supplied. Nor has the Examiner been able to read these documents based on his admission that they are not available to him.

Applicant respectfully submits that this rejection, which is based on references that are not available to the Examiner or the Applicant, violates the fundamental substantive and procedural due process to which Applicant is entitled under the Administrative Procedures Act. See in this regard, In re Zurko, 119 S.Ct. 1816, 50 USPQ2d 1930 (1999), and In re Gartside, 53 USPQ2d 1769 (Fed. Cir. 2000).

Nevertheless, to be fully responsive, Applicant will respond to the merits of the rejection to the extent that these two Kokoku references are discussed in U.S. Patent 5,737,306 to Ito et al. (hereinafter, "Ito").

Although the rejection is stated in terms of Saito in view of Kokoku, the body of the rejection seeks to modify Kokoku in view of Saito.

Kokoku (as discussed in Ito) fails to disclose the positively recited features of claims 1, 19 and 29. Even the Office Action only alleges that Kokoku merely teaches having a composite CAV/CLV disc recording ability.

Saito is directed to accomplishing stable optical spot control and high density recording/reproduction without being affected by a shift of a pit edge position – see col. 3, lines 27-31. Moreover, as pointed out in col. 5, lines 43-64, for example, Saito also changes the division number of its clock generation circuit so that a recording/reproduction clock has a constant frequency. In other words the original oscillation frequency of Saito's phase locked loop (PLL) is prevented from changing even when the appearance of the clock marks change, by changing the division number of the PLL inside the data clock generation circuit.

The Office Action speculates that it would be obvious to modify the meagerly disclosed Kokoku references in view of Saito's wobble synch signals to provide for proper control of write ability and permit appropriate switching as desired.

Applicant respectfully submits that the Office Action fails to provide objective factual evidence of the desirability to modify the meagerly disclosed Kokoku references in view of Saito.

In the first place, the Office Action does not demonstrate that either Kokoku reference needs to be improved.

In the second place, not enough is known about how the Kokoku references operate to know how to modify them or whether they would have to be reconfigured or how they would have to be reconfigured or changed to accommodate Saito's system.

In the third place, even if the proposed modification were obvious, the Office Action fails to demonstrate that the resulting reference combination would disclose, suggest or make obvious the claimed invention, especially where Kokoku fails to disclose any of the features recited in the body of the independent claims 11 and 19.

In the fourth place, Saito apparently only checks his sync signal to ensure proper reproduction of servo data – see col. 5, line 43 to col. 6, line 25. There is absolutely no disclosure or hint in either reference of determining whether to change the recording mode between CAV and CLV based on a checked frequency of a detected sync signal.

Because neither reference discloses determining whether to change the recording mode between CAV and CLV based on a checked frequency of a

detected sync signal, the rejection must be based on improper speculation and/or impermissible hindsight reconstruction of the claimed invention.

Because all dependent claims recite at least the features of independent claims 11 and 19, dependent claims 12-18 and 20-28 are patentable over the applied art.

Reconsideration and withdrawal of this rejection of claims 11-28 is respectfully requested.

Claim 29 stands rejected under 35 USC §103(a) as unpatentable over claims 1 or 19 as applied above in view of Kusano. This rejection is respectfully traversed.

This rejection is actually referring to the rejection of claims 11 and 19, a fact that was confirmed in a recent telephone conversation with Examiner Psitos. Examiner Psitos also stated that this rejection of claim 29 is based on the rejection of claims 11-28 under 35 USC 103(a) over Saito in view of the two Kokoku references, and further in view of Kusano.

Applicant notes that the aforementioned Saito-Kokoku reference combination does not render the claimed invention obvious for the reasons stated above.

The Office Action turns to Kusano for a teaching of "the use of control elements (microprocessors) for decision-making," referring to Fig. 9, and concludes that it would be obvious to modify the base system.

Applicant notes that the base reference combination is not further discussed, nor is any objective factual evidence presented to explain why one of ordinary skill in the art would desire to modify the unspecified base system. In this regard, Examiner Psitos stated, in the aforementioned telephone conversation, that the motivation to combine these references is to provide appropriate control elements.

-Applicant respectfully submits that this is nothing more than a broad conclusory statement about the teaching of all the applied references, in general, and is not the detailed specific type of evidence of motivation needed to provide incentive to combine these references. See In re Dembiczak, cited above.

Applicant respectfully submits that the Office Action fails to provide proper motivation to combine these references for the reason stated above and for the following reasons.

In the first place, Saito's system and Kusano's system differ significantly and the Office Action fails to explain which aspects of Saito are to be modified by Kusano and, if such an unexplained modification were to occur, whether it would result in a workable device.

In the second place, as noted above, Kusano uses an access controller 17 in the embodiment of Fig. 4 to detect the disk radial position, or a linear velocity detector 18 in the embodiment of Fig. 5, to detect the linear velocity of the disk, to determine where synchronization is possible.

Kusano does not disclose or suggest detecting a sync signal from signals embedded in a wobbled physical track; checking the frequency of the detected sync signal; or determining whether to change the recording mode or not based on the checked frequency, as recited.

Accordingly, because all three of the applied references fail to disclose all of the recited features of the claims, modifying Saito and the Kokoku reference combination could not possibly result in the claimed invention.

Reconsideration and withdrawal of this rejection of claim 29 is respectfully requested.

Rejection Under 35 U.S.C. §102

Claims 11-29 stand rejected under 35 USC §102(e) as being anticipated by U.S. Patent 6,570,831 to Choi. This rejection is respectfully traversed.

Choi fails to disclose determining whether to change the recording mode or not based on the checked frequency, as recited, or determining means to perform this positively recited function.

The only switching disclosed by Choi is discussed in col. 4, lines 1-21, which disclose switching the connection state of a switch depending on whether recording is requested or reproduction is requested.

Because claims 12-18 depend on claim 11 and claims 20-28 depend from claim 19, these dependent claims are also not anticipated by Choi.

Reconsideration and withdrawal of this rejection is respectfully requested.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8076, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Pursuant to the provisions of 37 CFR 1.17 and 1.136(a), Applicant respectfully petitions for a one (1) month extension of time for filing a response in connection with the present application. The required fee of \$120.00 is attached hereto.

In the event that the restarting of the time period for reply is denied, Applicant requests a second month extension of time, and authorizes the charge to Deposit Account No. 02-2448.

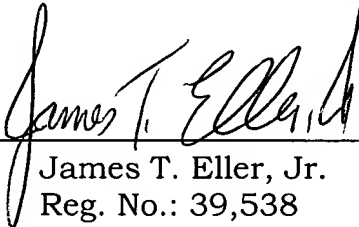
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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